MADRAS.

PWD.

G.O.No. 220 D., 22nd Feb. 1924.

Bellary water supply scheme - estimate — Rs. 9.51 lakhs sanctioned.

Government of Madras

PUBLIC WORKS DEPARTMENT

G.O. No. 220 W., 22nd February 1924

Bellary water-supply scheme—Estimate—Rs. 9·51 lakhs—Sanctioned.

Address :--
Post Box No. 410.,
Chepauk, Madras.

Office Copy

No.2635 Wks A/23-1
Government of Madras.
PUBLIC WORKS DEPARTMENT

MEMORANDUM.

Dated, Madras, the 31st December 1923.

Read the following :--

From the Sanitary Engineer to Government
No. 526-G., dated 27th September 1923.

BELLARY WATER SUPPLY SCHEME.

The Government desire that the Bellary Water Supply Scheme for which funds will be made available should be put in hand without delay. The Sanitary Engineer is therefore requested to submit forthwith detailed plans and estimate for the scheme based on the approximate estimate (Rs.12.31 lakhs) referred to in Memo No. 23235-1 P.H & 12-12-23.

M.R. Kharegat,
Offg: Secretary to Government, P.W.D.
(General, Buildings and Roads).

To the Sanitary Engineer to Government.
Copy to the Local Self Government (P.H.) Department.

Forwarded to the

(By Order).

Superintendent.

Address :--
Post Box No. 410.,
Chepauk, Madras.

Office Copy

No.2635 Wks A/23-1
Government of Madras.
PUBLIC WORKS DEPARTMENT

3P

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To the Sanitary Engineer to Government.
Copy to the Local Self Government (P.H.) Department.

Forwarded to the

(By Order).

Superintendent.

Sectt. II—10 (a)—12-1-15.

P. W DEPARTMENT

Read

Issue to Supdt

Issue to Supdt

Read abstract Head 18.

READ AGAIN G.O. No. 351 W, dated 13 - 3 - 1918 sanctioning a revised estimate of Rs 31,500 for a full power test - Bellary W.S. scheme

Print Abstract " 37 W, " 7 - 1 - 1920. Approving a supplemental estimate of Rs 6000 for the full power test Bellary W.S. Scheme

READ ALSO:—

P/C Print Quick. -- Memo. to the Sanitary Engr. to Govt. No. 2635 W&A-14 31 - 12 - 1923.

C. No. 198 W&A, From the Sanitary Engr. to Govt., No. 41 Gr., dated 22 - 1 - 1924

Print.

1457 Print. " , " " Note by the Chief Engr. P.W.D., No 198 W&A/24-18 4 - 2 - 1924.

" " , " " , " 191

ORDER.

No. 220 W, dated 22 - 2 - 1924

Print Press

Circulation

Vide abstract in C

The estimate amounting to Rs 11,36,000 recommended in the Chief Engineer's note read above, for the Bellary Water-Supply scheme includes the following provisions:

(1) Provision for centage charges at 15½% ——— Rs 147,444.

(2) Estimates for full power test sanctioned in the Gos read again above Rs 37,500.

The estimate amounting Rs 951,056 (excluding (1) and (2) above) is sanctioned subject to the remarks in the Chief Engineer's note read above,

Read

and as supplemental to the estimates aggregating Rs 37800 sanctioned in the G.Os read again above

2 Separate orders will be issued regarding Centage charges and the provision of funds for the work

[redacted]
6-2-24

(B.O.G.M)

for S.

DESPATCHED
22 FEB 1924

To the S.E. Madras Circle
with 24 plans – N.C. nos 79/4681 + 84/6102 of 19 and San Nos 1 and 2 of 24 –
and an estimate.
" Sanitary Engineer to Govt.
" A.G. Madras. through the Finance Dept
" d S.G. (P.H) Dept. with copy 2 nos
" Finance Dept. with copy 2 nos.

(2 Copies for file in this office)

FD.
Sd/ [illegible]
25/3

Government of Madras

PUBLIC WORKS DEPARTMENT

G.O. No. 220 W., 22nd February 1924

Bellary water-supply scheme—Estimate—Rs. 9·51 lakhs—Sanctioned.

READ—the following papers :—

I

G.O. No. 351 W., dated 13th March 1918.

ABSTRACT.—Sanctioning a revised estimate of Rs. 31,500 for a full power test—Bellary water-supply scheme.

II

G.O. No. 37 W., dated 7th January 1920.

ABSTRACT.—Approving a supplemental estimate of Rs. 6,000 for the full power test—Bellary water-supply scheme.

III

Memorandum No. 2635 Wks.-A/23-1, dated 31st December 1923.

IV

Letter from J. S. WESTERDALE, Esq., B.SC., M.INST.C.E., Sanitary Engineer to Government to the Chief Engineer, Public Works Department (Buildings and Roads), dated 22nd January 1924, No. 41-G.

With reference to Public Works Department Memorandum No. 2635-Wks./A-23-1, dated 31st December 1923, I have the honour to forward herewith for favour of sanction detailed plans and revised estimate together with a report for the scheme of water-supply to the town of Bellary.

ENCLOSURE

Report on the Bellary water-supply scheme.

The scheme now prepared is revised as per Sanitary Engineer's suggestions contained in this office No. 526-G., dated 27th September 1923.

2. The construction of the third infiltration well provided in the original estimate amounting to Rs. 13,500 is omitted for the present owing to the reduction of consumption to 7 gallons per head per day and the estimate for additional works for infiltration wells already constructed exclusive of the work sanctioned in G.O. No. 371 W., dated 2nd March 1916, is reduced to Rs. 20,000 by omitting the pipe connexions provided in the original estimate.

3. The original design for the engine-house is retained although only two engines and pumps are proposed for the present; hence there is no change in the amount of estimate for this item.

4. Two engines and pumps capable of developing 40 p.h.p are provided in the present estimate in lieu of three engines and pumps provided in the original estimate ; hence the amount is reduced to Rs. 1,20,000.

5. Provision for constructing stores and workshops is retained in the present estimate.

6. Provisions made for constructing quarters for head driver, assistant driver, fitter, coolies, cleaner and firemen are omitted in the present estimate.

7. Provision for constructing a latrine of six seats and proposed roadway are retained in the present estimate.

8. Provision for railway siding, platform, and portable light railway is omitted in the present estimate.

9. Provisions for casurina plantation and venturi meter with house are retained in the present estimate.

10. Twelve inches spun cast iron pipes have been provided in the present estimate for pumping main in lieu of ordinary cast iron pipes provided in the original estimate since they are 25 per cent lighter in weight and considerably cheaper than cast iron pipes resulting in a reduction in the original estimate for this item to Rs. 4,23,800.

11. The amounts provided in the original estimate for compensation for service reservoir site and for the construction of an elevated service reservoir are retained in the present estimate.

12. Spun cast iron pipes are provided for the distribution system except 3", 2½" and specials. Hence the amount provided in the original estimate for this item is reduced to Rs. 1,24,300 and against Rs. 1,13,080 provided in the approximate estimate and the amount provided for laying and jointing in the original estimate is also reduced to Rs. 24,000 as a less number of joints are required for spun cast iron pipes which are of 12 feet length.

13. Centage charge is increased to 30 per cent.

14. The rates provided for the masonry works are the same as those provided in the original estimate but the rates adopted for spun cast iron pipes and specials are current rates.

15. The comparative statement showing the differences between the original and the revised estimate is put up herewith.

16. The following are the enclosures to the report:—

(1) One portfolio of plans as originally drawn.
(2) Plan San. No. 2/24 showing infiltration wells constructed and omitting the third well.
(3) Section of the wells, plan San. No. 1/24.
(4) One file of estimates.

V

Note by the Chief Engineer, Public Works Department, No. 198-Wks. A/24-1, dated 4th February 1924.

The question of providing a scheme of water-supply for the town of Bellary has been under consideration for some years and the Sanitary Engineer to Government submitted in June 1920 plans and an estimate amounting to Rs. 16,37,000 for the scheme with the Hagari river as the source of supply prepared by him on the lines of instructions issued in Memorandum No. 686-Wks. A-1, dated 16th July 1919.

2. The estimate as altered by the Chief Engineer amounting to Rs. 16,46,000 was recommended for sanction in September 1921, subject to certain remarks. The sanction to the estimate was apparently held over on account of financial stringency.

3. As water famine was threatening, the Chief Engineer proceeded to Bellary in the month of November 1923 and after discussing the question of water-supply to the town of Bellary with the local officers recommended that a modified Hagari scheme estimated to cost Rs. 12·307 lakhs may be sanctioned. As the Government desired that the modified scheme recommended by the Chief Engineer should be put in hand without delay, the Sanitary Engineer was, in Memorandum No. 2635 Wks. A/23-1 of 31st December 1923, requested to submit forthwith detailed plans and estimate for the modified scheme.

4. Accordingly the Sanitary Engineer now submits plans and a detailed estimate amounting to Rs. 12·73 lakhs for the Bellary water-supply scheme.

5. The scheme now drawn up provides for the same works as those recommended for sanction in 1920 except the following items:—

(1) The third infiltration well has now been omitted as unnecessary, at present.

(2) The number of engines and pumps has been reduced from 3 to 2.

(3) Spun cast iron pipes have been provided for cast iron pipes for pumping and distribution system.

(4) The provisions made for (*a*) quarters for head driver, (*b*) quarters for assistant driver and fitter, (*c*) quarters for coolies, cleaners and firemen and (*d*) rail way siding platform and portable light railway have for the present been omitted as unnecessary.

(5) The rate of centage charges has been increased from 24 to 30 per cent.

6. The estimate has been scrutinized by the Chief Engineer and the points requiring remarks are dealt with below :—

(1) The results of the further tests made in 1920 have revealed that the water is quite good for drinking purposes.

It is however observed that the wells are easily affected by the flood water in the Hagari river. In consideration of the fact that the conditions at the Hagari river are peculiar, the water in the left bank being brackish and on the right bank in the sandy area fresh and wholesome, and that there is no other source nearer Bellary dependable on as to quantity, the Chief Engineer considers that Government should take the risk of increased brackishness during flood times.

In order to keep off the ordinary flood water from the vicinity, an island berm three feet high should be formed around the wells. The berm may be protected by rubble revetment but its necessity should be determined by experiment during execution.

(1) (*a*) The provision of Rs. 32,600 made for the engine-house is approved. A fresh design for the engine-house to suit the vertical pumping engines providing suitable concrete foundations for the engines should be prepared by the Sanitary Engineer and submitted to the Chief Engineer for approval before the work is put in hand.

(2) A lump sum provision of Rs. 3,500 has been made in the estimate for constructing municipal stores and workshops as per Sanitary type-design No. 111 issued with the Sanitary Board Proceedings No. 112–S, dated 24th March 1911. Detailed estimate for the work should be approved by the Superintending Engineer before the work is put in hand.

(3) The lump sum provision of Rs. 6,000 made in the estimate for forming a roadway from the railway station to the engine-house, etc., is approved. The alignment of the road and the detailed estimate for the work should however be approved by the Superintending Engineer before the work is put in hand.

(4) The advisability of laying the pumping main along the red dotted lines near the railway crossing instead of along the short curved streets as shown in plan N.C. No. 85 of 1919 and along the red dotted lines on the right bank of the river as shown in plan N.C. No. 87 of 1919 instead of along the right margin should be considered carefully during execution.

(5) The estimate for Rs. 12,73,900 now submitted by the Sanitary Engineer provides 30 per cent for centage charges. As the Government are now considering the reduction of the centage charges from 30 to 15½ per cent, the latter percentage has been adopted on the assumption that it will be approved by Government and the amount of the estimate reduced from Rs. 12,73,900 to Rs. 11,36,000.

7. With the foregoing remarks the estimate as altered by the Chief Engineer amounting to Rs. 11,36,000 is recommended for sanction.

M. R. KHAREGAT,
Chief Engineer, P.W.D. (General, Buildings and Roads).

Order—No. 220 W., dated 22nd February 1924.

The estimate amounting to Rs. 11,36,000 recommended in the Chief Engineer's note read above, for the Bellary water-supply scheme includes the following provisions :—

	Rs.
(1) Provision for centage charges at 15½ per cent	1,47,444
(2) Estimates for full power test sanctioned in the Government Orders read again above	37,500

The estimate amounting to Rs. 9,51,056 [excluding (1) and (2) above] is sanctioned subject to the remarks in the Chief Engineer's note read above, and as supplemental to the estimates aggregating Rs. 37,500 sanctioned in the Government Orders read again above.

2. Separate orders will be issued regarding centage charges and the provision of funds for the work.

(By order of the Government, Ministry of Public Works)

M. R. KHAREGAT,
Offg. Secy. to Govt., P.W.D. (General, Buildings and Roads).

To the Superintending Engineer, Madras Circle, with 24 plans—N.C. Nos. 79 to 81 and 84 to 102 of 1919 and San. Nos. 1 and 2 of 24 and an estimate.
" Sanitary Engineer to Government.
" Accountant-General, Madras (through the Finance Department).
" Local Self-Government (Public Health) Department (with copy of notes).
" Finance Department (with copy of notes).

the charges be levied at the current rate, may be accepted. Separate orders will have to issue on the question of supplemental estimates for the full-power test and centage charges leviable for the present scheme.

3. As regards funds, attention is solicited to the proposals in Memorandum No. 23235-1, P.H., dated 12th December 1923, which have been agreed to by the Council (pages 54–57 of G.O. No. 65, P.H., dated 12th January 1924).On an approximate estimate of the expenditure proposed in the current year furnished by the Public Works Department, provision for a grant of Rs. 66,000 has been made for the work in the revised estimate of expenditure from the lump provision of 8 lakhs for water-supply and drainage schemes. For the funds required next year, it has been decided to obtain them by making a supplementary demand. Action will be taken in this regard on receipt of the order in this department with a copy of these notes.

F

4. The case may be passed on to Finance.

M.T.D.—9-2-24. B. RAMA RAO—9-2-24.

FINANCE DEPARTMENT.

The draft order may be accepted.

T.K.S.—9-2-24. T. A. STRINIVASARAGHAVA AYYANGAR—9-2-24.

R. W. DAVIES—10-2-24.

PUBLIC WORKS DEPARTMENT.

The estimate of Rs. 9,51,056 (excluding centages) for the Bellary Water-supply Scheme is proposed to be sanctioned as supplemental to the estimates for full power test for the scheme. The attention of Local Self-Government may be invited to paragraph 3 of G.O. No. 780, P.H., dated 5th July 1921, and the rules issued therewith and they may be requested to state whether the approval of the Sanitary Commissioner (now Director of Public Health) or of the Public Health Board is necessary to the present scheme. If considered necessary, they may be requested to obtain the requisite approval at a very early date.

P. RANGANAYAKULU—12-2-24.

T.P.S.—12-2-24. M. R. KHAREGAT—12-2-24.

LOCAL SELF-GOVERNMENT (PUBLIC HEALTH) DEPARTMENT.

Paragraph 3 of G.O. No. 780, P.H., dated 5th July 1921, does not make it obligatory on the part of the Government to consult the Public Health Board in the case of all schemes falling under item (ii) referred to therein. It only states that the Government *may* consult the Public Health Board. In the present case it does not seem necessary that the Public Health Board should be consulted as it is only likely to involve more delay in the speedy execution of the scheme. It does not seem necessary to consult the Director of Public Health also.

This may be returned to the Public Works Department with the above remarks.

M.T.D.—13-2-24.

The Public Health Board need not be consulted in this case.

B.R.R.—14-2-24.

P. L. MOORE—14-2-24.

PUBLIC WORKS DEPARTMENT.

Submitted.

T.P.S.—19-2-24. P.R.—19-2-24.

M.R.K.—19-2-24.

A. P. P[ATRO]—21-2-24.

I hope that the orders about centage charges and provision of funds will be got out at a very early date.

C. G. T[ODHUNTER]—21-2-24.

PUBLIC WORKS DEPARTMENT.

NOTES CONNECTED WITH G.O. No. 220 W., DATED 22ND FEBRUARY 1924.

[SUBJECT.—*Bellary Water-supply Scheme.*]

I

From the Sanitary Engineer, No. 41-G., dated 22nd January 1924.

II

Note by the Chief Engineer, Public Works Department, No. 198-Wks/4/24-1, dated 4th February 1924.

The Sanitary Engineer submits plans and an estimate amounting to Rs. 12,73,900 for the Bellary Water-supply Scheme. The estimate has been scrutinised by the Chief Engineer and is recommended by him for sanction with remarks—vide his note on pages 2 and 3, current file.

2. The amount of the estimate as now altered by Chief Engineer, by reducing the provision for centage charges from 30 per cent to 15½ per cent. is Rs. 11,36,000. This amount includes the following provisions :—

	RS.
(1) Centage charges	1,47,444
(2) Estimates for full-power test sanctioned in G.Os. No. 351 W, dated 13th March 1918 and No. 37 W., dated 7th January 1920	37,500

Excluding these, the estimate amounts to Rs. 9,51,056. This may be sanctioned as supplemental to the estimates already sanctioned (vide 2 above).

3. As the scheme (including the full-power test—the estimates for which have not yet been closed) has been in progress since 1916 (i.e., in progress prior to 9th February 1918)the rules previously in force as to centage charges are applicable, i.e., this work should be exempt from supervision charges (Rule 16 annexed to G.O. No. 548, Finance, dated 15th June 1920). The question of centage charges for this scheme has therefore been separately remitted to Local Self-Government for decision in consultation with the Accountant-General and the Financial Department.

4. *Funds.*—Orders as to funds have to be issued in the Local Self-Government Department. (A copy of these notes will be sent to that department along with the order.)

5. A draft order is accordingly submitted. The draft states that separate orders will be issued as to centage charges and provision of funds. The draft may be forwarded to the Local Self-Government and Finance Departments for very early acceptance prior to circulation.

T.P.S.—6-2-24.

P. RANGANAYAKULU—7-2-24.
M. R. KHAREGAT—7-2-24.

LOCAL SELF-GOVERNMENT (PUBLIC HEALTH) DEPARTMENT.

The draft order may be accepted.

2. With reference to the question of centage charges leviable for the work the proposal of Finance, that the charges in respect of the full-power test (actual cost Rs. 43,937) be levied according to the orders in 593 W., dated 9th May 1908, and that in respect of the new scheme for which estimates are now under consideration

The order may now be issued.

2. The question of centage charges etc., will be taken up separately.

J.R.—21-2-24. P. RANGANAYAKULU—21-2-24.

Issue.

M. R. KHAREGAT—21-2-24.

Since the file was last seen by Local Self-Government, paragraph 6 (1) in the Chief Engineer's note has been added.

The file may therefore be now sent to Local Self Government for perusal and return.

2. That department will no doubt circulate the case to M-1, if necessary.

P.R.—25-2-24.

LOCAL SELF GOVERNMENT (PUBLIC HEALTH) DEPARTMENT.

Paragraph 6 (1) of the Chief Engineer's note may be perused. He considers that the Hagari water might get brackish in flood times. The suggestion to keep off ordinary flood water by forming an island berm round the wells may be accepted.

The file may be returned to the Public Works Department unofficially after perusal by M-1.

M.T.D.—26-2-14.

M-1 for perusal.

B. RAMA RAO—27-2-24.

P. R[AMARAYINGAR]—3-3-24.

[G.O. No. 220 W., dated 22nd February 1924.]